

Firm Frequency Response (FFR) Market Information Report for Mar-19

Published

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Key Points

This Market Information Report is relevant for tenders submitted in Feb-19 for delivery in **Mar-19**

Tenders from eligible service providers for Firm Frequency Response should be submitted on **Fri 01-Feb-19** (1st business day) for all tenders.

National Grid will notify service providers of the outcome of the tender assessment, and preliminary nominations, by **Mon 18-Feb-19** (12th business day).

From January 2018, non-compliant tenders will be rejected prior to assessment.

Providers must use the template provided in the Ariba system to tender in for FFR. Use of any other template or submissions via e-mail will not be accepted.

In line with the standardisation outlined in the Product Road Map, procurement of FFR will only take place across the standard 6 EFA blocks. Tenders must therefore only start, and end, at the following times: 2300, 0300 0700 1100 1500 1900. Submitted tenders must have a minimum window availability of 4 hours in line with EFA blocks.

Please note that this is a month ahead only tender. Tenders should therefore be submitted for Mar-19 delivery.

The details regarding the dates, times and dial in details for the upcoming FFR Result WebEx can be found [here](#).

Real-time data i.e. demand and frequency data, over the last 60 minutes can now be found on the [Realtime Extranet](#) section on the National Grid website. [Historic frequency data](#) as far back as 2014 can also be accessed for GB data at 1 second resolution.

For further information please contact your account manager or:
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This Market Information Report provides information to FFR providers on the requirement for the tender (TR 110) for delivery in Mar-19.

Requirements for Mar-19 (TR 110)

Primary Response:

A dynamic primary requirement exists in EFA blocks 1 and 2. There is no requirement outside these blocks.

Secondary Response:

A dynamic secondary requirement exists in EFA blocks 1 and 2. There is no requirement for dynamic secondary outside these blocks.

A non-dynamic secondary requirement exists in all EFA blocks with larger volumes of requirement present in EFA block 5. As this requirement sits outside the minimum dynamic requirement, provision can be taken from either the dynamic or the non-dynamic market dependant on the economics of each solution.

High Response:

A dynamic high requirement is present across all 6 EFA blocks. The most prominent requirement is during EFA blocks 3 to 6.

A breakdown of the outstanding requirement for this tender round can be found in Appendix 1. A full breakdown of the long-term requirements can be found in Appendix 1 in the excel file.

Market Updates

FCDM

The implementation plan for our new suite of frequency response products is due to be published on the Future of Balancing Services page in February. This report will provide more information on the products being introduced, and what the preconditions and dependencies of implementation are. It will also explore the interactions of implementing the new products with the existing FFR market.

FFR Auction Trial

Ahead of the FFR auction trial in which weekly FFR procurement will be undertaken, a portion of the dynamic and non-dynamic FFR requirement will be transferred from the monthly tenders to the weekly auction. Please look out for updates on the [Future of Balancing Services](#) webpage.

In order to implement the new product suite, and avoid overholding of response volumes, it will be necessary to gradually reduce our long term procurement of the existing P S H products. Under the current arrangement, the March 2019 FFR tender would normally advance the procurement horizon for P S H response (dynamic and static) from 31 March 2021 to 30 September 2021, and seek to procure a small volume. We will not be procuring this additional small volume at the present time, but we will continue to hold monthly FFR tenders for month ahead volume, and quarterly FFR tenders for volume up to 31 March 2021.

EFA Block Procurement

For providers wishing to start a tender on the last day of the previous month, these tenders cannot start earlier than 2300 or they will be deemed as non-compliant.

The minimum requirement across each specific EFA block will determine how much volume will be procured for each of the 6 daily 4 hour blocks.

Any outstanding shape will be satisfied, where necessary, closer to real time by the Electricity National Control Centre.

Forward Look at Requirement for TR111

A forward look at requirements for TR111, the next long term tender, can be found in Appendix 8.

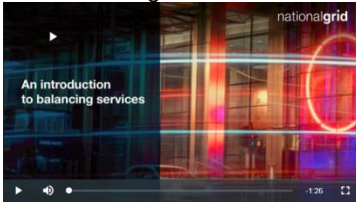
Response BOA and Holding Volume and Cost

This information is in Appendix 7 of the adjoining excel file.

5 explanatory videos have been unloaded to the National Grid website. Each video focuses on a different element of Frequency Response as a balancing service, how Electricity National Control Centre makes use of it and how the Firm Frequency Response assessment is undertaken. To view the videos, click on the linked images below.

Video 1

How balancing services work



Video 2

The National Grid electricity control room



Video 3

Frequency response



Video 4

Firm frequency response



Video 5

The FFR assessment process



Testing

Providers are required to have successfully passed FFR testing of their asset by the National Grid Generator Compliance Team prior to tendering in for month ahead delivery. E.g. If tendering to provide a FFR service starting on 1st Mar-19, the unit must have passed testing prior to the tender submission window closing on the 1st business day in Feb-19. Tenders that do not meet this requirement will be deemed non-compliant and automatically rejected.

Limiting tenders

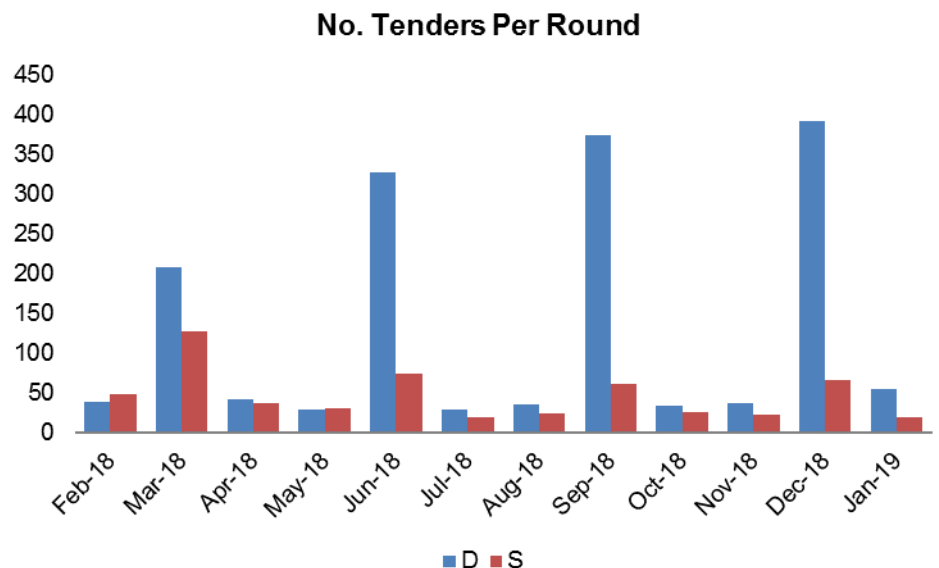
Providers are limited to submitting 3 tenders per unit, per tender period. A tender period is considered to be; month ahead, quarter ahead and per season. All-or-nothing bids will be considered as 1 tender submission.

Jan-19 FFR Delivery

89 active FFR contracts are due to provide FFR in Feb-19. These contracts are made up of:

- 59 dynamic contracts
- 30 non-dynamic contracts
- 4 contracts by BMU providers
- 85 contracts by NBMU providers

The chart below displays the number of tenders submitted in the FFR market for the last 12 months by service type.



Key messages

Tender rejection codes

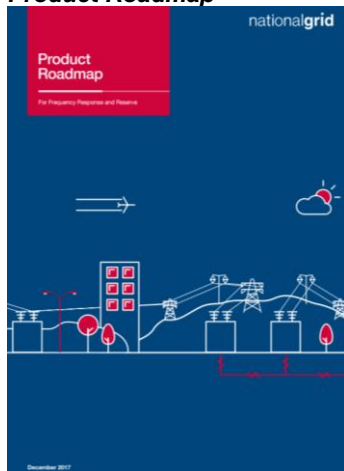
The table below provides guidance as to the reasons why a tender has been rejected. They can be matched against the numbers in the 'Reason Code' section of the Post Tender Report.

FFR service Overview



Interactive guidance document

Product Roadmap



This document sets out the actions to be taken forward for frequency response and reserve.

| No. | FFR Reason Code | Comment |
|-----|---|--|
| 1 | Beneficial | While the price submitted was considered beneficial, on this occasion this tender was not accepted for one of the following reasons: 1.1. The outstanding or desired procurement requirement has already been satisfied by more beneficial tenders 1.2. There was no outstanding requirement 1.3. The desired volume against the National Grid procurement strategy for future tender months had already been satisfied 1.4. This tender formed part of an all-or-nothing group which did not collectively deliver enough benefit to be considered |
| 2 | Price not beneficial across tendered period | The price submitted was too high and did not provide any contract benefit against alternative actions including the mandatory and optional market. |
| 3 | Does not meet tender prerequisites | Please refer to the 'Technical Parameters' section using the following link to determine the criteria necessary to participate in the FFR market https://www.nationalgrid.com/uk/electricity/balancing-services/frequency-response-services/firm-frequency-response |
| 4 | Multiple tenders received for the same unit | Only the most valuable tender(s) of the total group of submitted tenders was considered. |
| 5 | Beyond desired procurement volume | Tenders submitted contained volume in a period where no procurement volume existed |

Enhanced Frequency Response (EFR)

100% of EFR is included in the requirements from July 2018.

Procured Volume

When determining which tenders to accept, National Grid will take account of its planned procurement strategy. In general, a measured approach is taken to determine the appropriate volume to procure throughout the duration of the tender

Appendix 1:

A breakdown of the outstanding month ahead requirement for this tender round.

Dynamic FFR requirements for TR 110

| EFA Block | Dynamic Response Required (MW) | | |
|-----------|--------------------------------|-----------|------|
| | Primary | Secondary | High |
| 1 | 246 | 113 | 11 |
| 2 | 246 | 113 | 11 |
| 3 | 0 | 0 | 37 |
| 4 | 0 | 0 | 37 |
| 5 | 0 | 0 | 40 |
| 6 | 0 | 0 | 36 |

Non-Dynamic FFR requirements for TR 110

| EFA Block | Non-Dynamic Response Required (MW) | | |
|-----------|------------------------------------|-----------|------|
| | Primary | Secondary | High |
| 1 | 0 | 193 | 0 |
| 2 | 0 | 153 | 0 |
| 3 | 0 | 185 | 0 |
| 4 | 0 | 191 | 0 |
| 5 | 0 | 268 | 0 |
| 6 | 0 | 111 | 0 |

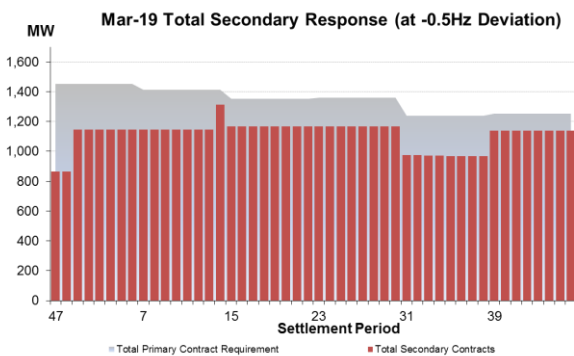
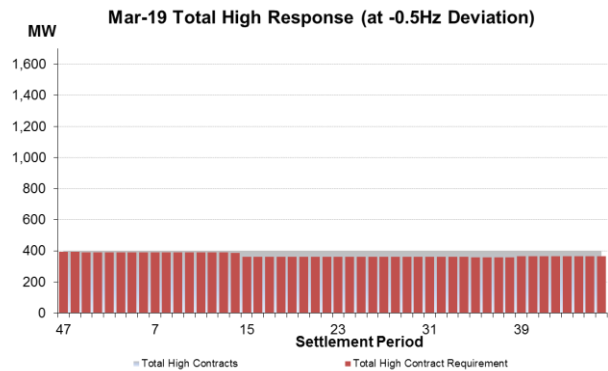
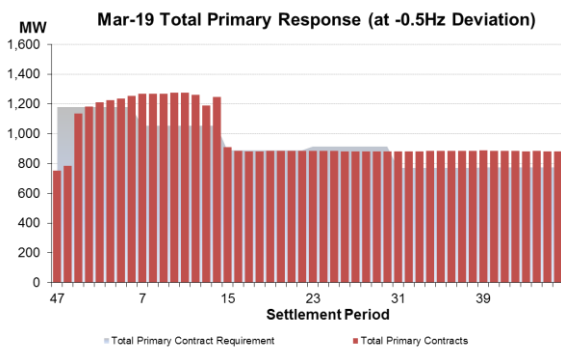
Appendix 2: Mar-19 Requirements

The three charts below display the volume of frequency response left to contract at month ahead against the total response requirements. The red bars represent existing contracted service provision (both dynamic and non-dynamic) including any optional non-FFR services routinely used that National Grid forecast to be cost effective for the month ahead. The grey shaded area is the remaining volume to contract.

For month ahead only, except for circumstances where there is a specific dynamic requirement, the requirement will be taken from either dynamic or non-dynamic providers where deemed economic to do so. This means that any requirement found in the non-dynamic market may be procured in the dynamic market if considered more beneficial. With no primary non-dynamic market in existence, procurement of this volume across any EFA block will instead be taken from the dynamic market.

The breakdown of the requirement against dynamic and non-dynamic response can be seen in the tables in appendix 1.

In the move to standard EFA block window durations, the minimum of the total requirement across each EFA block outlines the level to be procured. In light of this transition, the minimum dynamic requirement remains a key component to be satisfied and outstanding volume against this will continue to be procured for operational purposes. For Mar-19, this is highlighted in the table in Appendix 1.



Appendix 8: Forward Look at Requirements for Apr-19 onwards (TR 111)

In the next long term tender (TR111), we will be aiming to procure volume in specific periods. Exceptions will only be made where volume could be procured at zero cost. However, consideration will be given to the system impact of any decisions and we will not accept tenders if they are likely to have a detrimental effect, regardless of price. Any tenders with a cost greater than £0/MWh submitted for periods where no procurement requirement is indicated will not be accepted. The specific periods of procurement are shown below.

This does not change the process by which secondary non-dynamic requirement can be taken from either the dynamic or non-dynamic market at month ahead where deemed economic to do so. For the avoidance of doubt, this will not be applied beyond month ahead.

Dynamic Primary & Secondary:

| Period: | EFA Block 1 | EFA Block 2 | EFA Block 3 | EFA Block 4 | EFA Block 5 | EFA Block 6 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Month ahead (Apr 19) | Yes | Yes | No | No | No | No |
| Quarter ahead (Apr 19 – Jun 19) | Yes | Yes | No | No | No | No |
| Summer 19 (Apr 19 – Sep 19) | Yes | Yes | No | No | No | No |
| Winter 19/20 (Oct 19 – Mar 20) | No | No | No | No | No | No |
| Summer 20 (Apr 20 – Sep 20) | Yes | Yes | No | No | No | No |
| Winter 20/21 (Oct 20 – Mar 21) | No | No | No | No | No | No |

Dynamic High:

| Period: | EFA Block 1 | EFA Block 2 | EFA Block 3 | EFA Block 4 | EFA Block 5 | EFA Block 6 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Month ahead (Apr 19) | Yes | Yes | Yes | Yes | Yes | Yes |
| Quarter ahead (Apr 19 – Jun 19) | Yes | No | No | No | No | No |
| Summer 19 (Apr 19 – Sep 19) | No | No | No | No | No | No |
| Winter 19/20 (Oct 19 – Mar 20) | No | No | No | No | No | No |
| Summer 20 (Apr 20 – Sep 20) | No | No | No | No | No | No |
| Winter 20/21 (Oct 20 – Mar 21) | No | No | No | No | No | No |

Non-dynamic Secondary:

| Period: | EFA Block 1 | EFA Block 2 | EFA Block 3 | EFA Block 4 | EFA Block 5 | EFA Block 6 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Month ahead (Apr 19) | Yes | Yes | Yes | Yes | Yes | Yes |
| Quarter ahead (Apr 19 – Jun 19) | Yes | Yes | Yes | Yes | Yes | Yes |
| Summer 19 (Apr 19 – Sep 19) | No | No | Yes | Yes | Yes | Yes |
| Winter 19/20 (Oct 19 – Mar 20) | No | No | Yes | Yes | Yes | Yes |
| Summer 20 (Apr 20 – Sep 20) | No | No | Yes | Yes | Yes | Yes |
| Winter 20/21 (Oct 20 – Mar 21) | No | No | No | No | Yes | No |